DWR Climate News Digest

October 2018

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The information provided in the DWR Climate News Digest is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management, and is intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS

Agriculture/Food Production

<u>Earth's population is skyrocketing. How do you feed 10 billion people sustainably?</u>
[Washington Post – October 10, 2018]

"The 23 authors of the report, hailing from Europe, the United States, Australia and Lebanon, reviewed the many moving parts of the global food system and how they interact with the environment. The authors concluded that the current methods of producing, distributing and consuming food aren't environmentally sustainable and that damage to the planet could make it less hospitable for human existence."

5 Major Crops in The Crosshairs of Climate Change

[National Public Radio – October 25, 2018]

"Climate change is coming like a freight train, or a rising tide. And our food, so dependent on rain and suitable temperatures, sits right in its path. Here are five foods, and food-growing places, that will see the impact."

General Water Management

In Colorado, Water Bosses Begin to Accept Climate Change Impacts

[Water Deeply – October 8, 2018]

"The phrase "climate change" did not appear on the agenda of a recent three-day meeting of the Colorado Water Congress, but the topic was often front and center at the conference, as it increasingly is at water meetings around the state and the region."

Less Snow Could Be Coming to California's Sierra Nevada Mountains

[Capital Public Radio – October 10, 2018]

"If temperatures increase in California because of climate change, snow could melt earlier in the Sierra Nevada — and you might only find it at higher elevations."

Sea-Level Rise and other Ocean Impacts

<u>In Poor Neighborhoods, Add Rising Seas to List of Housing Woes</u>

[KQED – October 3, 2018]

"Housing is already a major issue for the Bay Area's economically vulnerable. Now, the rising sea level is compounding worries about environmental contamination and housing scarcity."

Sinking Santa Cruz: climate change threatens famed California beach town

[The Guardian – October 11, 2018]

"Similar challenges are sprouting up along the coast, and the golden sands and beach properties that define the state at risk."

Extreme Weather Events

<u>The Hurricanes, and Climate-Change Questions, Keep Coming. Yes, They're Linked.</u>
[New York Times – October 10, 2018]

"Scientists are increasingly confident of the links between global warming and hurricanes."

Freak summer weather and wild jet-stream patterns are on the rise because of global warming

[Washington Post – October 31, 2018]

"Linked to the warming climate, the study suggests this change in the atmosphere's steering current is making these extremes occur more frequently, with greater intensity, and for longer periods of time."

Human Health Impacts

As climate change worsens, mental health probably will too

[Quartz – October 11, 2018]

"A paper published in the Proceedings of the National Academy of Sciences by researchers from MIT, Harvard, and other top American research institutions concluded that climate change has the potential to worsen mental health on a mass scale."

Warming Ocean Temperatures Are Causing a Rise in Infectious Diseases

[KPBS – October 29, 2018]

"Warming ocean temperatures are often linked to hurricanes and sea level rise but there's also a connection to infectious disease."

Wildlife and Ecosystem Impacts

Where Have All the Critters Gone? Blame Climate Change

[KQED – October 18, 2018]

"Insect populations in the tropics are facing a crisis as global warming drives up temperatures, causing a 98 percent decline in their numbers over the last four decades."

Invasive species may spread with help from climate change

[CBS News - October 28, 2018]

"As seasonal cycles shift and ecosystems are thrown off balance, those invasive species — and many others — could infiltrate a broader range of territories with devastating consequences to our health, vital habitats and industries."

Greenhouse Gas Mitigation

Climate change is inevitable—but not in the way the EPA thinks

[Popular Science – October 1, 2018]

"Lowering car emissions isn't a silver bullet, but it would help."

21 States, 5 Cities Demand Trump Administration Preserve California's Stricter Fuel Efficiency Guidelines

[Fortune – October 26, 2018]

"Attorney generals from 21 states and leaders of five cities demanded that the Trump administration withdraw its attempt to weaken clean car standards."

Climate Change Modeling

Climate Change May Cost the U.S. More Than Almost Any Other Country

[Popular Mechanics – October 1, 2018]

"A new analysis finds America is one of the hardest hit by the future costs of climate change."

Blockchain And Climate Change

[NPR – October 25, 2018]

"There's a lot of buzz about how big data and now blockchain will "solve climate change." Scientists are concerned that the hype plays into a dangerous idea that there's a technological magic bullet."

Climate Change Adaptation

How Cities Are Upgrading Infrastructure to Prepare for Climate Change

[Smithsonian – October 22, 2018]

"Although it's early days, some cities and municipalities are starting to recognize that past conditions can no longer serve as reasonable proxies for the future."

How plants and animals are teaching scientists to fight climate change

[NBC News - October 28, 2018]

"In the emerging field of biomimicry, scientists and inventors take inspiration from trees, whales and coral."

International Planning

The world has just over a decade to get climate change under control, U.N. scientists say

[Washington Post – October 8, 2018]

"The world stands on the brink of failure when it comes to holding global warming to moderate levels, and nations will need to take "unprecedented" actions to cut their carbon emissions over the next decade, according to a landmark report by the top scientific body studying climate change."

Clean up climate change? It's just good for business.

[Washington Post – October 8, 2018]

"If the world's largest companies live up to the promises they've made to slow climate change, together they could reduce emissions by an amount equal to those of Germany."

Communicating Climate Change

Using Drones to Tell the Story of Climate Change

[New York Times – October 1, 2018]

"The story outlines how drones are being used to document the threat climate change poses to some of the world's most precious cultural sites."

How A Fortnite Squad of Scientists Is Hoping to Defeat Climate Change

[The Verge – October 10, 2018]

"While they play (and stream to Twitch), they chat about climate change. The three-month-old squad has set out to make climate change information accessible to Fortnite fans."

BLOGS/Commentary

Fighting climate change is too expensive because destroying the planet is cost-free

[Washington Post – October 1, 2018]

"Among the many, many ways the United States has failed in its discussion of climate change is the idea that all the costs are on one side of the equation."

Groundwater Management is Key to Adapting to Climate Change

[PPIC – October 30, 2018]

"Climate change is increasing drought intensity, making groundwater—with its immense potential for low-cost storage—an ever more important water source."

Additional Items of Interest

Sunk costs: Airports taking action against rising seas, storms as climate changes

[Reuters – October 1, 2018]

"Global airport operators, faced with rising sea levels and more powerful storms as the climate changes, are starting to invest in measures including higher runways, seawalls and better drainage systems to future-proof immovable assets."

Living with Fire in Northern California

[Scientific American – October 3, 2018]

"A wave of conflagrations has altered both the land and human psyches."

Why Half a Degree of Global Warming Is a Big Deal

[New York Times – October 7, 2018]

"Half a degree may mean the difference between a world with coral reefs and Arctic summer sea ice and a world without them."

Bitcoin Predicted to Be the Nail in The Coffin of Climate Change

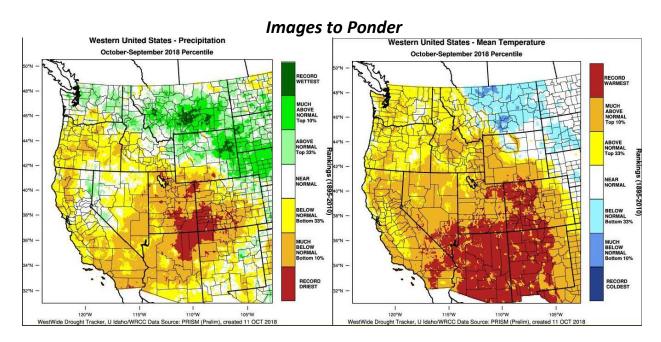
[Forbes – October 29, 2018]

"Bitcoin alone could push global temperatures over the 2ºC catastrophic threshold by 2034 if the cryptocurrency gets adopted at the same pace as other broadly used technologies, says a new report in the journal Nature Climate Change.

Climate Change Is Scary; 'Rat Explosion' Is Scarier

[Bloomberg – October 30, 2018]

"Scientists warn of global warming of 2 degrees Celsius. If you think that won't affect you, think how it may affect pests."



As Colorado River enters yet another year of lower than average conditions, important to remember that large portions of the Upper and Lower Colorado River Basin in 2018 were both the hottest and driest on record.

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